



ALAMEDA COUNTY  
CONGESTION MANAGEMENT AGENCY

---

1333 BROADWAY, SUITE 220 • OAKLAND, CA 94612 • PHONE: (510) 836-2560 • FAX: (510) 836-2185  
E-MAIL: [mail@accma.ca.gov](mailto:mail@accma.ca.gov) • WEB SITE: [accma.ca.gov](http://accma.ca.gov)

*April 13, 2009*  
*Agenda Item 5.2*

**Memorandum**

**DATE:** March 31, 2009

**TO:** Administration and Legislation Committee

**FROM:** Bijan Yarjani, Ph.D., Project Manager

**SUBJECT:** Grand MacArthur Corridor Transit Enhancements Project: Construction Status Report

**Action Requested:**

The CMA's adopted Construction Administration Guide requires that a quarterly construction status report be provided to the Administration and Legislation Committee. It is recommended that the Committee review and approve the attached Construction Contract Progress Report for activities through March 31, 2009.

**Discussion:**

The CMA, in association with AC Transit, has secured a total of \$4,220,000 in RM2, CMAQ, and TFCA funds to plan, design and deploy the Grand MacArthur Corridor Transit Enhancements project. This project is a key first step towards bringing transit improvements to the Grand Avenue/MacArthur Boulevard Corridor. This project will be modeled after the existing San Pablo Avenue and International/Telegraph SMART/BRT Corridors.

**Financial Impact:**

The revenues and costs associated with this project have been incorporated in the CMA's proposed first quarter budget update. If approved, the project will be funded through RM-2, TFCA and CMAQ funds.

*This page intentionally left blank.*

# GRAND MACARTHUR RAPID BUS TSP/EVP PROJECT

## Construction Status Report For January 1<sup>st</sup>, 2009 through March 31<sup>st</sup>, 2009

Attachment  
Agenda Item 5.2

### PROJECT DESCRIPTION

The work consists, in general, of signal controller cabinet upgrades, signal interconnect, installation of Emergency Vehicle Prevention (EVP) equipment, Video Detection Equipment (VDE), traffic control, and other work as shown on the plans and specified in the contract special provisions. The plans include work on two major arterial corridors in the City of Oakland, the Grand Avenue and MacArthur Blvd arteries. These two corridors are critical AC Transit routes traveling through areas of high-density housing, with high-volume pedestrian and vehicular traffic.

The purpose of the project is to implement an integrated, multi-modal advanced transportation management system similar to the SMART Corridors program and to deliver the Transit Signal Priority elements along these corridors by the fall of 2009. The AC Transit Rapid Bus program and the CMA East Bay SMART Corridors program have evolved into a multi-year, multi-phased program, implementing several major infrastructure improvements in the corridors and have contributed to the strengthening of interagency coordination and cooperation.

### Project Elements

The Grand MacArthur Boulevard Rapid Bus TSP/EVP Corridor project deploys a variety of civil, traffic, and Intelligent Transportation System (ITS) elements that would collectively improve the operations and safety of the arterial and the Rapid Bus corridors. Such improvements include:

1. Emergency Vehicle Pre-emption (EVP) and Transit Signal Priority Systems (TSP) that will provide for the safe and fast passage of emergency vehicles as well as extending preferential treatment to the Rapid Buses at signalized intersections. These systems are implemented through the deployment of infrared detector and emitter modules.
2. Video Image Detection (VID) will detect vehicles at each leg of an intersection using fixed video cameras and associated image equipment that analysis software. This technology replaces inductive loops cut into the street surface which are impacted by pavement conditions.
3. Traffic signal modifications including pedestrian pushbuttons, pedestrian traffic signal heads traffic signal interconnection, traffic signal cabinet and controllers upgrades.
4. Various construction elements including curb ramps, sidewalk and bus stops modifications at various locations of the projects.

### SUMMARY STATUS

The Grand MacArthur Boulevard Rapid Bus TSP/EVP project opened bids on July 9, 2008. Notice of Intent of Award was sent to all six bidders indicating the intent to award the contract to Ray's Electric Inc. No bid protests were received and a Notice to Proceed letter was sent to Ray's Electric Inc. stating that the first working day under the contract would be September 22, 2008. The contract consists of 160 working days for base bid items and 30 additional working days for three additional

Additive Bid Items. Additive one consists of MacArthur Interconnect (EAST 38<sup>th</sup> Street to Lincoln Avenue) work; additive two consists of Transit Enhancements work at MacArthur/Lincoln; and additive three, Transit Enhancements consists of work at MacArthur/Seminary Avenue.

Project activities during this period include weekly meetings with the contractor, monthly meetings with CMA's project manager, City of Oakland, AC Transit and DKS; coordination with PG&E to resolve service points structure drawings needed at three locations. All submittals required by the contract have been received, reviewed and approved. Approval by the Community and Economic Development Agency (CEDA) was negotiated and obtained to give a waiver to the contractor to work in holiday restricted streets (Grand Avenue).

Following is the contract and construction status of the project:

## **CONTRACT AND CONSTRUCTION STATUS**

### **Contractor: Ray's Electric, Inc. of Oakland**

- **Contract Status:** The contract was awarded on July 31, 2008, by CMA, in the amount of \$1,324,058 (Base + Additives=\$1,048,058+ \$276,000).
- **Construction Status:** Ray's Electric, the contractor, started construction activities in September 22, 2008. The ongoing field work consists of installation of conduit by trenching or directional boring along MacArthur Blvd. All the underground installation along Grand Avenue has been completed, including the installation of VID cameras and EVP units. The contractor is waiting on agency furnished controller cabinets so the newly pedestrian push button system can be activated and the system new cameras and EVP units can be tested and programmed accordingly.
- Contract change order No. 1 (additional push buttons per City of Oakland's request) was coordinated with the designer, DKS, City of Oakland and the CMA. Contract change order No. 1 approved by the CMA on 12/9/08. Contract change order No. 2 for additional vehicle signal heads and ramp modifications at 38<sup>th</sup> and MacArthur Blvd. has been written but it has not been approved.
- Coordination with the designer, (DKS), CMA, AC Transit and City of Oakland for needed timing cards for controllers to be installed by contractor.
- Contract scheduled to be completed by July 27, 2009.

## **Financial Status**

This section of the report includes a review of the project construction budget as well as a review and overall status of Contract Change Orders.

### **Budget and Expenditure Summary**

The project and construction contract is within budget. Contract change order 1, Additional Push Buttons, has been executed. No change orders to address differing site conditions have been written. Shown in the table below, is the status of the project contingency funds:

**Project No. A08-011 - Grand MacArthur(RAY'S ELECTRIC):**

**Construction Bid Price (including additives) \$1,324,058.00**  
**Supplemental Work and Contingency: \$133,000.00**  
**Total Construction Budget: \$1,457,058.00**

Status of Contract Change Orders (CCO) and Supplemental Work						
CCO No.	DESCRIPTION	Payment Method	Time	CCO Amount	Paid to date	Budget Remaining
	CCO Contingency Budget					\$133,000.00
1	Additional Push Buttons	Agreed Unit Prices	0	\$76,405.70	\$39,870.20	\$56,594.30
2	Additional Vehicle Heads and Modify Ramp @ MacArthur & 38th	Agreed Unit Prices	0	\$10,043.11	\$0.0	\$46,551.19

Total= \$86,448.81

### Schedule Status

When preparing project plans, the design engineer includes a specification that informs the contractor how long he has to perform the work. This information is provided in the form of Working days, which typically include only regular business days, or Calendar days, which do not include Saturday and Sunday. Days when weather conditions prevent work are not counted in the totals in the Working days format. Presented in the table below is a status of the construction contracts in terms of Working/Calendar Days completed as well as the number remaining.

Project	Grand Avenue – MacArthur Blvd
Original Number of Working Days	190
First Working Day	9/22/08
Weather Day Delays to Date	17
Contract Change Order Days	0
Days Other (WSWD No. 07R1)	4
Number of Working Days Charged to Date	98
Contract Time Completed to Date	52%
Revised Completion Date Based on Weather Days	7/27/09
Work Complete as of Billing to Date	45%

## **Outstanding Issues/Disputes/Claims**

The construction work and coordination is going well and most issues have been resolved or are being resolved with the contractor. No notice of potential claims has been filed by the contractor.

However, the contractor has expressed his concerns for inefficiencies to his normal progress of the work. A problem with the installation of software and timing cards for each controller has been an ongoing issue.

Contractor stated during last weekly meeting on March 11, 2009 that after March 11, he will move out of Grand Avenue and will return after controllers are ready for pick up or to construct bus Bulb-Out at Grand Avenue & Park View (If CCO No. 3 is approved). He stated that he needs to install the controllers as soon as possible so the cameras and EVP can be tested; and the PPB and the APS push button assemblies are installed. This issue should be resolved promptly in order to avoid a potential claim by the contractor.